

Unit Planning Guide: Grade 7 ____ Unit ____7 of 7____

Unit Title:Statistics	Pacing (Duration of Unit):
Grade:7	Buffer Day(s):

Desired Results

Transfer Goals

Students will be able to independently use their learning to:

- **Make sense of problems and persevere in solving them.**
- **Reason abstractly and quantitatively.**
- **Construct viable arguments and critique the reasoning of others.**
- Model with mathematics.
- Use appropriate tools strategically.
- Attend to precision.
- Look for and make use of structure.
- Look for and express regularity in repeated reasoning.

Established Goals (2011 MA Curriculum Frameworks Standards Incorporating the Common Core State Standards)

<p>Standards (Priority Standards in bold):</p> <p>Use random sampling to draw inferences about a population</p> <p>7.SP.1: Understand that statistics can be used to gain information about a population by examining a sample of the population; generalizations about a population from a sample are valid only if the sample is representative of that population. Understand that random sampling tends to produce representative samples and support valid inferences.</p> <p>7.SP.2: Use data from a random sample to draw inferences about a population with an unknown characteristic of interest. Generate multiple samples (or simulated samples) of the same size to gauge the variation in estimates or predictions.</p> <p>Draw informal comparative inferences about two populations</p> <p>7.SP.3: Informally assess the degree of visual overlap of two numerical data distributions with similar variabilities, measuring the difference between the centers by expressing it as a multiple of a measure of variability.</p> <p>7.SP.4: Use measures of center and measures of variability for numerical data from random samples to draw informal comparative inferences about two populations.</p>	<p>WIDA for English Language Learners</p> <p>Standard 1: ELLs communicate for Social and Instructional purposes within the school setting</p> <p>Standard 3: ELLs communicate information, ideas and concepts necessary for academic success in the content area of Mathematics</p> <p>In the lesson planning stage, teachers will need to differentiate lessons for ELLs. In order to accomplish this they will need: 1.) this curriculum map, 2.) a list of their ELLs and their proficiency levels, and 3.) appropriate language function expectations and scaffolds or supports.</p>
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<p align="center">Meaning (*Mostly assessed through Performance Tasks/Assessments)</p>

<p>Big Ideas: (Statements and concepts written in teacher friendly language which reflect the important [but not obvious] generalizations we want students to be able to arrive at. These are used by the teacher to focus daily instruction.)</p> <ul style="list-style-type: none"> Examining a sample of a population can help make generalizations and inferences about that population Measures of center and variability can be used to draw comparative inferences about two populations 	<p>Essential Questions: (Questions which frame ongoing and important inquiries about the big ideas. They are written for students and used in daily instruction to help engage students in meaningful thinking.)</p> <ul style="list-style-type: none"> How do we make good predictions?
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Acquisition (*Mostly assessed through traditional summative assessments)

Knowledge: Key basic concepts, facts, and key terms (written in phrases) students should be able to recall independently.

Students will know ...

- That samples can be used to make predictions and generalizations about a population
- Measures of center
- Measures of variability

Key Academic Vocabulary:

Measures of center

Measures of variability

Sample

Population

Inferences

Skills: The discrete skills and process students should be able to use independently (Bloom's Level of Learning should be noted in parentheses.)

Students will be skilled at:

- Selecting and examining a sample from a population
- Drawing inferences about a population from a random sample of data
- Comparing inferences using the mean
- Comparing populations using the median
- Comparing two populations using the range and inter quartile range
- Making cooperative inferences using the mean absolute deviation